

## WHAT IS CLAIMED IS:

1. A high pressure dispenser for the application of a medicinal mixture to a desired location, the dispenser comprising:
  - a handle;
  - a chamber that receives medicinal mixture coupled to the handle;
  - a threaded region within the handle;
  - a threaded rod in threaded engagement with the threaded region;
  - a knob coupled to the threaded rod; and
  - at least one insert-molded component, wherein the at least one insert-molded component includes at least one of a threaded insert providing the threaded region insert molded into the handle and a threaded rod insert molded into the knob.
2. The dispenser of claim 1, wherein the threaded insert includes metal or plastic.
3. The dispenser of claim 1, wherein the handle includes hard plastic and overmolded soft rubber.
4. The dispenser of claim 1, wherein the threaded rod includes metal.
5. The dispenser of claim 1, wherein an exterior surface of the chamber comprises at least one tab dimensioned to engage with at least one corresponding notch on an exterior surface of the handle.
6. The dispenser of claim 1, wherein an exterior surface of the chamber comprises at least one notch dimensioned to engage with at least one corresponding tab on an exterior surface of the handle.
7. The dispenser of claim 1, wherein the handle comprises four exterior longitudinal sides.

8. The dispenser of claim 1, wherein the knob has an axial length approximately equal to or greater than the diameter of the knob.
9. The dispenser of claim 1, wherein the knob has at least one longitudinal rectangular cavity.
10. The dispenser of claim 1, wherein the chamber comprises an interior cylindrical surface and a nozzle in fluid communication, and the interior of the chamber has a concave surface in between the interior cylindrical surface and the nozzle.
11. The dispenser of claim 1, wherein the threaded rod is coupled to a piston, the piston is insert molded into the threaded rod.
12. A high pressure dispenser, for the application of a medicinal mixture to a desired location, the dispenser comprising:
  - a handle comprising four exterior longitudinal sides, wherein at least one exterior longitudinal side includes hard plastic and at least one exterior longitudinal side includes overmolded soft rubber material;
  - a chamber that receives medicinal mixture coupled to the handle;
  - a threaded region within the handle;
  - a threaded rod in threaded engagement with the threaded region;and
  - a knob coupled to the threaded rod.
13. The dispenser of claim 12, wherein a threaded insert providing the threaded region is insert molded into the handle.
14. The dispenser of claim 12, wherein the threaded rod is insert molded into the knob.
15. The dispenser of claim 12, wherein the threaded rod is coupled to a piston, the piston is insert molded into the threaded rod.

16. The dispenser of claim 12, wherein the handle includes internal ribs.

17. The dispenser of claim 12, wherein the handle has two exterior longitudinal sides that include hard plastic and two exterior longitudinal sides that include hard plastic and overmolded soft rubber.

18. A high pressure dispenser for the application of a medicinal mixture to a desired location, the dispenser comprising:

a handle;

a chamber that receives medicinal mixture coupled to the handle;

a threaded region within the handle;

a threaded rod in threaded engagement with the threaded region;

and

a knob coupled to the threaded rod, wherein an exterior surface of the chamber comprises at least one tab or notch dimensioned to engage with at least one corresponding notch or tab on an exterior surface of the handle.

19. The dispenser of claim 18, wherein the knob has an axial length approximately equal to or greater than its diameter and at least one longitudinal rectangular cavity.

20. The dispenser of claim 18, wherein a threaded insert providing the threaded region is insert molded into the handle.

21. The dispenser of claim 18, wherein the knob has at least two longitudinal ribs, two of the longitudinal ribs intersect each other at approximately a 90 degree angle.

22. A high pressure dispenser for the application of a medicinal mixture to a desired location, the dispenser comprising:

a handle;

a chamber that receives medicinal mixture coupled to the handle, wherein the chamber comprises an interior cylindrical surface and a nozzle in fluid communication, and the interior of the chamber has a smooth concave surface between the interior cylindrical surface and the nozzle;

a threaded region within the handle;

a threaded rod in threaded engagement with the threaded region;

and

a knob coupled to the threaded rod.

23. The dispenser of claim 22, wherein the interior of the chamber has a convex surface between the interior cylindrical surface and the nozzle in fluid communication with the concave surface.

24. The dispenser of claim 22, wherein the threaded rod is coupled to a piston, the piston has an exterior convex surface that is configured to uniformly mate with the concave surface of the chamber.

25. The dispenser of claim 22, wherein an exterior surface of the chamber comprises at least one tab dimensioned to engage with at least one corresponding notch on an exterior surface of the handle.